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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,976	05/24/2001	Evan E. Koslow	369.7217USU	3444

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EXAMINER

BOYD, JENNIFER A

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
09/864,976	KOSLOW, EVAN E.	
Examiner	Art Unit	
Jennifer A Boyd	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. The Applicant's Amendments and Accompanying Remarks, filed September 16, 2003, have been entered and have been carefully considered. Claims 1, 10 and 17 are amended and claims 1 - 25 are pending. In view of Applicant's Amendments, the Examiner withdraws the 25 U.S.C. 102(b) rejection of claims 1 - 3, 6 - 12 and 15 - 18 as being anticipated by Koslow (US 6,015,608). Despite this advance, the invention as currently claimed is not found to be patentable for reasons herein below.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102/103

3. Claims 1 - 3, 6 - 12, 15 - 18 and 21 - 23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Koslow (U.S. 6,015,608).

Koslow is directed to a liquid absorbent pad with anti-gel block laminate (Title).

Koslow teaches a liquid absorbent pad as seen in Figure 1 comprising an outer layer 10 of a liquid impervious material as required by claim 8, such as a thin plastic film or membrane, having an outer surface and inner surface 12. Mounted on the inner surface 12 of the outer layer 10 are a plurality of laminate segments, such as strips 14 (a-c), separated from one another by spaces 22 creating the Applicant's "channels". Each of the strips includes a bottom layer 16 of tissue, an upper layer 18 of tissue, and an intermediate layer 20 of super-absorbent polymer

particles bonded to the bottom and upper tissue layers by thermoplastic binder particles, creating the "bonded mixture". The "bonded mixture" has admixture of super-absorbent polymer particles and much smaller particles of thermoplastic binder (column 1, lines 30 - 35). As to claim 2, the super-absorbent polymer particles in the intermediate layer "channels" absorb the liquid.

Mounted on the laminate strips 14 is a liquid acquisition layer 24. The acquisition layer 24 may be of any material currently used for this purpose and known to those skilled in the art such as an air laid medium. The outer layer 10 in combination with the bottom layer 16 of tissue segments are equated to Applicant's "first substrate". As to claim 9, the liquid acquisition layer in combination with the upper layer 18 of tissue are equated to Applicant's "second substrate". As to claims 6 and 7, an optional liquid-permeable skin-contacting spun-bonded medium 26 is provided, equated to Applicant's "liquid permeable acquisition layer" (column 2, lines 29 - 65).

As to claim 10, the composite will absorb liquid when used as a diaper or in feminine hygiene products (column 1, lines 5 - 7), which is placed close to the body, thus adjacent to the liquid source.

As to claim 21, it should be noted that "super-absorbent polymer particles **capable of** substantially spontaneously forming a three-dimensional array of elongated channels with said composite upon contact with a liquid wherein the three-dimensional array of elongated channels promotes liquid acquisition into said composite along the three-dimensional array of elongated channels prior to liquid absorption by the super-absorbent polymer particles". It should be noted that the Examiner considers the clause to be a "capable of" type limitation. It has been held that an element is "capable of" performing a function is not a positive limitation but only requires the

ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

As to claims 1 - 2, 10 - 11 and 17, although Koslow does not explicitly teach the claimed super-absorbent polymer particles substantially spontaneously form a three-dimensional array of elongated channels with said composite upon contact with a liquid wherein the three-dimensional array of elongated channels promotes liquid acquisition into said composite along the three-dimensional array of elongated channels prior to liquid absorption by the super-absorbent polymer particles and at least some of the bonded mixture has the property of collecting liquid from said liquid source within said three-dimensional array, and the collected liquid in said array is absorbed by at least some of the bonded mixture, it is reasonable to presume that the properties are inherent to Koslow. Support for said presumption is found in the use of like materials (i.e. a liquid absorbent pad as seen in Figure 1 comprising an outer layer of a liquid impervious material, such as a thin plastic film or membrane mounted on the inner surface of the outer layer are a plurality of laminate segments, such as strips 14 (a-c), separated from one another by spaces creating the Applicant's "channels". Each of the strips includes a bottom layer of tissue, an upper layer of tissue, and an intermediate layer of super-absorbent polymer particles bonded to the bottom and upper tissue layers by thermoplastic binder particles, creating the "bonded mixture". The "bonded mixture" has admixture of super-absorbent polymer particles and much smaller particles of thermoplastic binder (column 1, lines 30 - 35). Mounted on the laminate strips is a liquid acquisition layer which may be of any material currently used for this purpose and known to those skilled in the art such as an air laid medium) which would result in the claimed property. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205

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USPQ 594. In addition, the presently claimed property would obviously have been present once the Koslow product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

As to claims 11 - 12, 15 - 16, 18, and 22 - 23, the patent limitations are set forth above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4 - 5, 13 - 14, 19 - 20 and 24 - 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koslow (U.S. 6,015,608)

Koslow discloses the claimed invention except for that the bonded mixture has a dry thickness of less than about 2 millimeters. It should be noted that thickness is a result effective variable. For example, if the thickness increased, the composite would become more rigid and heavy. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the bonded mixture with a dry thickness of less than about 2 millimeters since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, it would have been obvious to optimize the thickness of the bonded mixture to have a thin, pliable material.

Response to Arguments

6. Applicant has failed to provide any arguments in the response filed September 16, 2003.

Comments


7. In regards to the independent claims, the Applicant has failed to differentiate the structure or composition of the SAP particles from the prior art. The prior art has met the limitations of a bonded mixture comprising a mixture of binder particles and super-absorbent polymer particles (Koslow, column 2, lines 35 – 45). The Applicant has given no other physical limitations for comparison to the prior art for the bonded mixture, therefore, the Examiner assumes that the “spontaneous channel forming” property would be inherent. If said property is not inherent, it is asserted that Applicant’s claims must be incomplete. In other words, if Applicant’s asserts a lack of inherency in the prior art product, then Applicant’s claimed invention is missing an element that is critical to the invention, which would patentably distinguish it from the known prior art. It is suggested to the Applicant to provide additional details in the claims that would physically differentiate the prior art product from the instant invention rather than merely stating properties that result from a particular presently unknown structure. The Applicant has indicated in the Specification that certain types of SAP exhibit the claimed property (Specification, page 5, paragraph 5) such as SAP grade SP-1224. It is suggested to include this in the independent claim limitations along with any other structural features that would cause the “spontaneous channel forming” property.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0994.


Jennifer Boyd
December 16, 2003


TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700